Estd. 1995

SETHU INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

Pulloor, Kariapatti – 626 115

ISO 9001-2008
FS 70973

M.E. COMPUTER SCIENCE & ENGINEERING

REGULATION 2015

CHOICE BASED CREDIT SYSTEM

CURRICULUM

(1st SEMESTER To 4th SEMESTER)

Approved in the Academic Council Meeting held on 21.07.2017

CHAIRMAN

ACADEMIC COUNCIL

SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

M.E. Degree Programme

CURRICULUM

Regulations 2015

(Applicable to the students admitted from the Academic Year 2015-2016 onwards)

Master of Engineering in COMPUTER SCIENCE AND ENGINEERING

OVERALL COURSE STRUCTURE

Category	Total No. of Courses	Credits	Percentage
Basic Science	**1**	**4**	**5.71**
Programme-CORE	**11**	**30**	**42.85**
Programme- ELECTIVE	**5**	**15**	**21.43**
Open Elective	**1**	**3**	**4.3**
Project Work	**2**	**18**	**25.71**
TOTAL	**22**	**70**	**100**

Course Credits – Semester wise

Branch	I	II	III	IV	V	VI	VII	VIII	TOTAL
M.E.-CSE	**18**	**18**	**19**	**15**	**-**	**-**	**-**	**-**	**70**

Master of Engineering in Computer Science and Engineering
REGULATION – 2015

(Applicable to the students admitted from the Academic Year 2015 – 2016 onwards)

CURRICULUM

PROGRAMME CORE

WINTER SEMESTER

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C	OFFERED DURING SUMMER OR WINTER	Category
1.	15PMA121	Advanced Mathematics for Computing	3	1	0	4	Winter	BS
2.	15PCS101	Analysis of Algorithms and Data Structures	3	0	0	3	Winter	PC
3.	15PCS102	Machine Learning Techniques	3	0	0	3	Winter	PC
4.	15PCS103	Advanced Operating Systems	3	0	0	3	Winter	PC
5.	15PCS104	Advanced Data Structures Laboratory	0	0	3	2	Winter	PC
6.	15PCS303/ 15PNE301	Mobile and Pervasive Computing	4	0	0	4	Winter	PC
7.	15PCS301	Multicore Architecture	3	0	0	3	Winter	PC
8.	15PCS302	Project Phase I	0	0	6	3	Winter	PC
SUMMER SEMESTER								
9.	15PCS201	Data Science and Big Data Analytics	3	0	0	3	Summer	PC
10.	15PCS205/ 15PNE203	Network Security	3	0	0	3	Summer	PC
11.	15PCS202	Internals of Android	3	0	0	3	Summer	PC
12.	15PCS203	Cloud Infrastructure Laboratory	0	0	3	2	Summer	PC
13.	15PCS204	Industrial Training and Internship	0	0	2	1	Summer	PC
14.	15PCS401	Project Work Phase II	0	0	30	15	Summer	PC

ELECTIVES

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
1.	15PCS501	Software Requirements Engineering	3	0	0	3
2.	15PCS502	Software Architectures and design	3	0	0	3
3.	15PCS503	Software Quality Assurance	3	0	0	3
4.	15PCS504	Open Source Systems and Networking	3	0	0	3
5.	15PCS505	Compiler Optimization Techniques	3	0	0	3
6.	15PCS506	Information Storage Techniques	3	0	0	3
7.	15PCS507	Energy Aware Computing	3	0	0	3
8.	15PCS508	Web Data Mining	3	0	0	3
9.	15PCS509	Mobile Applications Development	3	0	0	3
10.	15PCS510	Information Retrieval Techniques	3	0	0	3
11.	15PCS511	Robotics	3	0	0	3
12.	15PCS512	Web Services	3	0	0	3
13.	15PCS513	Image Processing and Analysis	3	0	0	3
14.	15PCS514	Managing Big Data	3	0	0	3
15.	15PCS515	Enterprise Application Integration	3	0	0	3
16.	15PCS516	4G Mobile Technologies	3	0	0	3
17.	15PCS517	Cloud Application Development	3	0	0	3
18.	15PCS524/ 15PNE502	Video Analytics	3	0	0	3
19.	15PCS525/ 15PNE512	Network Protocols	3	0	0	3
20.	15PCS526/ 15PNE514	Social Network Analysis	3	0	0	3
21.	15PCS527/ 15PNE517	Information Security	3	0	0	3
22.	15PCS528/ 15PNE518	TCP/IP Design and Implementation	3	0	0	3
23.	15PCS529/ 15PNE521	Next Generation Networks	3	0	0	3

OPEN ELECTIVES

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
1.	15PSE601	Research Methodology	3	0	0	3
2.	15PEN602	Pedagogy for Engineering Education	3	0	0	3
3.	15PEN603	Professional and Communication Skill	2	0	2	3
4.	15PPE604	Soft Computing	3	0	0	3
5.	15PCD605	Industrial Safety	3	0	0	3
6.	15PCD606	Business Management and Leadership	3	0	0	3
7.	15PCS607	Management Information Systems	3	0	0	3

ELECTIVES FOR Ph.D. CANDIDATES

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
1.	15PCS518	Protocols and Architectures for Wireless Sensor Networks	3	0	0	3
2.	15PCS519	Language Technologies	3	0	0	3
3.	15PCS520	Multi objective Optimization Techniques	3	0	0	3
4.	15PCS521	Machine Learning	3	0	0	3
5.	15PCS522	Data Mining Techniques	3	0	0	3
6.	15PCS523	Industrial and Systems Engineering in Healthcare	3	0	0	3

SEMESTER I

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PMA121	Advanced Mathematics for Computing	3	2	0	4
2.	15PCS101	Analysis of Algorithms and Data Structures	3	0	0	3
3.	15PCS102	Machine Learning Techniques	3	0	0	3
4.	15PCS103	Advanced Operating Systems	3	0	0	3
5.		Elective I	3	0	0	3
PRACTICAL						
6.	15PCS104	Advanced Data Structures Laboratory	0	0	3	2
Total			15	2	3	18
Total Number of Credits: 18						

SEMESTER II

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PCS201	Data Science and Big Data Analytics	3	0	0	3
2.	15PCS205/ 15PNE203	Network Security	3	0	0	3
3.	15PCS202	Internals of Android	3	0	0	3
4.		Elective II	3	0	0	3
5.		Elective III	3	0	0	3
PRACTICAL						
6.	15PCS203	Cloud Infrastructure Laboratory	0	0	3	2
7.	15PCS204	Industrial Training and Internship	0	0	2	1
Total			15	0	5	18
Total Number of Credits: 18						

SEMESTER III

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PCS303/ 15PNE301	Mobile and Pervasive Computing	4	0	0	4
2.	15PCS301	Multicore Architecture	3	0	0	3
3.		Elective IV	3	0	0	3
4.		Elective V	3	0	0	3
5.		Open Elective	3	0	0	3
PRACTICAL						
6.	15PCS302	Project Work Phase I	0	0	6	3
Total			16	0	6	19
Total Number of Credits: 19						

SEMESTER IV

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
PRACTICAL						
1.	15PCS401	Project Work Phase II	0	0	30	15
Total			0	0	30	15
Total Number of Credits: 15						

TOTAL NO. OF CREDITS: 18+18+19+15=70

SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

M.E COMPUTER SCIENCE AND ENGINEERING (PART TIME)

REGULATION – 2015

CURRICULUM

(Applicable to the students admitted form the Academic Year 2015-2016 onwards)

OVERALL COURSE STRUCTURE

Category	Total No. of Courses	Credits	Percentage
Basic Science	**1**	**4**	**5.71**
Programme-CORE	**13**	**30**	**42.85**
Programme- ELECTIVE	**5**	**15**	**21.43**
Open Elective	**1**	**3**	**4.3**
Project Work	**2**	**18**	**25.71**
TOTAL	**20**	**70**	**100**

Course Credits – Semester wise

Branch	I	II	III	IV	V	VI	TOTAL
M.E.-CSE (Part Time)	**12**	**11**	**9**	**10**	**13**	**15**	**70**

SEMESTER I

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PMA121	Advanced Mathematics for Computing	3	2	0	4
2.	15PCS101	Analysis of Algorithm and Data Structures	3	0	0	3
3.		Elective I	3	0	0	3
4.	15PCS104	Advanced Data Structures Laboratory	0	0	3	2
Total			9	2	3	12
Total Number of Credits: 12						

SEMESTER II

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PCS201	Data Science and Big Data Analytics	3	0	0	3
2.	15PCS205/ 15PNE203	Network Security	3	0	0	3
3.		Elective II	3	0	0	3
PRACTICAL						
4.	15PCS203	Cloud Infrastructure Laboratory	0	0	3	2
Total			9	0	3	11
Total Number of Credits: 11						

SEMESTER III

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PCS102	Machine Learning Techniques	3	0	0	3
2.	15PCS103	Advanced Operating Systems	3	0	0	3
3.		Elective III	3	0	0	3
PRACTICAL						
Total			9	0	0	9
Total Number of Credits: 9						

SEMESTER IV

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PCS202	Internals of Android	3	0	0	3
2.		Elective IV	3	0	0	3
3.		Elective V	3	0	0	3
PRACTICAL						
4.	15PCS204	Industrial Training/Internship	0	0	2	1
Total			9	0	2	10
Total Number of Credits: 10						

SEMESTER V

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	15PCS303/ 15PNE301	Mobile and Pervasive Computing	4	0	0	4
2.	15PCS301	Multicore Architecture	3	0	0	3
3.		Open Elective	3	0	0	3
PRACTICAL						
4.	15PCS302	Project Work Phase I	0	0	6	3
Total			10	0	6	13
Total Number of Credits: 13						

SEMESTER VI

S.No.	COURSE CODE	COURSE TITLE	L	T	P	C
PRACTICAL						
1.	15PCS401	Project Work phase II	0	0	30	15
Total			0	0	30	15
Total Number of Credits: 15						

TOTAL NO. OF CREDITS: 12+11+9+10+13+15=70